



Vol. 12

CHICAGO, MAY, 1928

No. 11

OFFICERS

| | |
|---|-----------------------|
| Leon E. Stanhope..... | President |
| 59 E. Madison Street. Tel. Central 2577 | |
| Howard J. White..... | First Vice-President |
| 80 E. Jackson Blvd. Tel. Harr. 4145 | |
| George E. Helmle..... | Second Vice-President |
| Springfield, Illinois | |
| Robert C. Ostergren..... | Treasurer |
| 155 N. Clark Street. Tel. Central 8643 | |
| Walter A. McDougall..... | Secretary |
| 350 N. Clark Street. Tel. Sup. 9637 | |
| H. L. Palmer..... | Financial Secretary |
| 160 N. La Salle Street. Tel. Central 4214 | |

BOARD OF DIRECTORS

| | | |
|------------------------|------------------|-------------------|
| For One Year | M. C. Chatten | John W. Weiss |
| For Two Years | Alfred Granger | E. S. Hall |
| For Three Years | Byron H. Jillson | Harry B. Wheelock |

BOARD OF DIRECTORS

| | |
|--------------------|-------------------|
| N. Max Dunning | George C. Nimmons |
| Elmer C. Jensen | Dwight H. Perkins |
| Joseph C. Lewellyn | Irving K. Pond |
| Richard E. Schmidt | |

EDITORIAL STAFF MONTHLY BULLETIN

F. E. Davidson
Ralph C. Harris

PUBLICATION COMMITTEE

| | |
|----------------------------|----------------|
| E. S. Hall, Chairman | F. E. Davidson |
| Ralph C. Harris, Secretary | |

THE ANNUAL MEETING

The annual meeting and banquet of the Illinois Society of Architects will be held on the evening of June 26, 1928, in the Grand Ball Room of the Drake Hotel, Chicago.

The speaker of the evening and the program will be announced at a later date.

Every member of the Society, of course, will reserve this date.

THE MAY MEETING

The May meeting of the Society will be held on the evening of May 22 in the club rooms of the Architects Club of Chicago.

The speaker of the evening will be Dr. A. J. Pacini, Director of the Pacini Laboratories, who will speak on ultra-violet rays and their relation to architecture. The lecture will also include mechanical demonstrations.

Nominating committees will be appointed and elected to select candidates for officers for the Society for the ensuing year.

OUR SECRETARY REPORTS THE APRIL MEETING OF THE SOCIETY

Minutes of the Society Meeting Held April 24, 1928

Regular monthly meeting of the Illinois Society of Architects was held Tuesday evening, April 24, 1928, at the Architects Club.

President Leon E. Stanhope presided. Minutes of the preceding meeting were read and approved.

There being no business to transact, the meeting was turned over to Mr. Emery Stanford Hall, who gave an illustrated lecture on "Specification Structure." Mr. Hall made his lecture very interesting by calling on quite a number of the members for their interpretation of various phrases of a specification.

After Mr. Hall's lecture the meeting was adjourned.

Walter A. McDougall, Secretary.

THE RIGHT OF AN ARCHITECT TO LIEN

The Supreme Court of Illinois Sidesteps a Question of Law

May 15, 1928.

Illinois Society of Architects,
160 North La Salle Street,
Chicago, Illinois.

Attention Mr. Stanhope, President.

In re: Report and opinion, Mallinger case, 329 Ill.

(Supreme) 629.

Gentlemen:

The Supreme Court has just rendered its decision in the above case and has affirmed the finding of the Appellate Court as to the question of fact involved, but has wholly ignored the question of law involved in the construction of Section 1 of the Mechanic's Lien Law, as applied to cases of this character, on the ground that an answer to the second question was unnecessary because of its decision on the question of fact.

The final holding the Supreme Court in this case can be stated substantially as follows, to-wit:

"An architect who files a cross-bill in a foreclosure proceeding to enforce a mechanic's lien filed by him for plans and specifications prepared for a contemplated apartment building which was never built is not entitled to a lien where the evidence shows that as a part of his contract he was to secure a loan on the property and that his failure to do so resulted in the abandonment of the plans, and as the proceeding is in equity the question whether he has an action at law does not arise."

In my opinion, therefore, the Mallinger case has not affected what I consider to be the law in Illinois relative to the right of an architect to a mechanic's lien upon property when the architect prepares plans and specifications for a building which the owner contemplates erecting upon the premises, but which the owner does not in fact construct after the plans and specifications have been prepared and submitted by the architect.

Had the Appellate Court, in the Mallinger case, reversed the decision of the lower court upon the question of fact involved, no question would have been raised in the Supreme Court nor in the public mind as to the right of an architect to a mechanic's lien claim in cases of this character. It will be recalled that the Appellate Court, after reversing the finding of fact of the lower court, apparently felt that it should also go into the legal question of the right of an architect to a mechanic's lien; and, in the course of its opinion, it specifically stated that the cases of *Freeman v. Rinaker*, 185 Ill. 172, and *Nimmons v. Lyon & Healy*, 197 App. 376 (which were supposed previously to have correctly stated the law), had not decided the point involving the right of an architect to a mechanic's lien in this situation, but that these decisions were merely *dicta*.

The Appellate Court, in the Mallinger case, apparently made the same error which they charged the Supreme Court with making in the *Freeman* case; in other words, the statements made by the Appellate Court in the Mallinger case on this question were themselves *obiter dicta*, because the finding of fact made by the Appellate Court before it discussed the question of law was to the effect that the contract between the architect and the owner of the property in the Mallinger case, as a matter of fact, required the architect to prepare plans and specifications, supervise the construction of the building, and procure a loan with which to erect the building before he would be entitled to any compensation whatever from the owner; and the decision was rested upon that statement of facts. The Supreme Court affirmed the opinion of the Appellate Court on this question of fact; and while it is to be regretted that the Supreme Court did not specifically repudiate the observations made by the Appellate Court, it must have purposely avoided so doing either because

(1) such a discussion was unnecessary and, if this is true in the case of the Supreme Court, then the discussion of the Appellate Court was equally unnecessary and therefore the rule of law there laid down was not applicable to the case at bar;

or

(2) because the Supreme Court felt that the law applicable to the situation in which we are interested was already well settled in previous decisions.

It is my opinion, therefore, that the case of *Freeman v. Rinaker*, 185 Ill. 186, and the case of *Nimmons v. Lyon & Healy*, 197 App. 376, still represents the law in this state, and that the rule might be laid down as follows, to-wit:

"An architect who executes a contract with the owner of an unimproved piece of property whereby the architect agrees to draw plans and specifications, under which he does in fact draw plans and specifications for a building to be placed on the land described, performs services 'for the purpose of improving the property' and is therefore entitled to a mechanic's lien on the property described, even though a building is not in fact subsequently erected on the land described through no fault of his own. In other words, when an Architect under a contract draws plans and specifications for a building, even though he does not supervise its construction and even though a building is not in fact erected, **he nevertheless performs services for the purpose of building it and is entitled to a mechanic's lien on the property.**"

The rule, of course, presupposes that the architect's contract of employment does not make the construction of a building a **condition precedent** to his right to compensation for architectural services rendered by him.

Respectfully submitted,
Alexander H. Marshall.

ADVICE FROM OUR ATTORNEY

Illinois Society of Architects.
Gentlemen:

A recent experience in litigation on behalf of members of the Society prompts this letter. The writer has frequently reiterated, in open meetings of the Society, that there is no excuse whatever for any architect entering into the preparation of plans and specifications for a building without a definite agreement in writing covering his fees. Preliminary sketches are frequently prepared without such agreements and they result in frequent misunderstandings and sometimes litigation; but in any event they do not as a rule involve great expense. In the preparation of plans and specifications, however, there can certainly be no possible excuse for so unbusinesslike a practice.

In such cases, if a dispute later develops as to the fees to be paid to the architect, the latter is frequently at the mercy of conflicting verbal testimony as to what the terms of agreement were. Any writing is better than none. The American Institute and Illinois Society forms are, of course, the best and should be employed wherever possible. In their absence, a clearly stated understanding in the form of an accepted letter should suffice to protect the architect.

The writer's office is open and available to all members of the Society at all times for suggestions and counsel in these matters. By reason of my close association with your Society and a large number of its members I can perhaps be pardoned for expressing myself by saying that the unbusinesslike and careless conduct of some of our members—within my own experience with them—is nothing short of tragic. I know that some of our friends would say that such an architect ought to suffer the consequences of his own carelessness, if he is to receive the proper benefit of his experience; but it is our desire to awaken architects in general to the necessities of these situations, to save them from loss and aggravation, and by counsel and advice to cooperate in the development of a more practical, satisfactory and profitable business technique in the performance of their professional duties and in the discharge of their high calling.

Cordially and sincerely yours,
Alexander H. Marshall.

THE SUGGESTED UNIFORM MECHANICS' LIEN LAW

The committee working under the direction of the Department of Commerce has been having much difficulty in shaping up the suggested Uniform Mechanics' Lien Act.

A tentative revision of sections 5 and 6 of the second draft of

a uniform Mechanic's Lien Act was adopted by the Standard State Mechanics' Lien Act Committee, the Department of Commerce announced on May 9th.

The amendment to section 5 provides that an owner of property who has contracted for its improvement shall retain from the contractor 10 per cent of all money as it becomes due instead of requiring the contractor to give the owner at the time of each progress payment a sworn statement showing his outstanding obligations, as was contemplated in previous drafts of the section. The contractor would still be required, however, to submit such a sworn statement before receiving the final payment and the amounts retained by the owner.

Minor amendments have been made in section 6 to conform with those in section 5.

Under mechanics' lien acts which are in force in all states the claims of laborers, materialmen, subcontractors, contractors and others who contribute to the improvement of property are secured by the property improved which, under stated circumstances, may be sold to satisfy these claims when payment is not made by the person from whom it is due. Because of complaints that some existing laws are not equitable and that the differences in present laws cause expense and inconvenience to persons doing business in more than one state and to laborers moving from one state to another, this committee was appointed some time ago by Secretary Hoover at the request of interested groups.

The members of the committee are representatives of the principal groups engaged in the construction industries, including the American Federation of Labor. The National Conference of Commissioners on Uniform State Laws, which is a body composed of official delegates from each state, and which is interested in all uniform state legislation, is cooperating in this work through a committee appointed for the purpose. The recent meeting at which the tentative revision of sections 5 and 6 was made was a joint meeting of the two committees.

The first tentative draft of the Uniform Mechanics' Lien Act was published in the fall of 1926 and the second draft was printed in March of this year. Both were circulated among individuals and organizations known to be interested in the subject in order that the committee might have, through their suggestions, the benefit of a wide experience in the operation of such acts.

Copies of the revised sections may be had on request from Dan H. Wheeler, Secretary, Standard State Mechanics' Lien Act Committee, Department of Commerce, Washington, D. C.

Mr. Gerhardt Meyne, Vice-President of the Architects Club of Chicago, who has devoted a great deal of time as a member of the National Committee, on May 15 addressed the following letter to President Stanhope:

My dear Mr. Stanhope:

I am permitting myself to send the second tentative draft of a Uniform Mechanics' Lien Act for your perusal and criticism.

The Standard State Mechanics' Lien Act Committee solicits your severest criticism and especially that of the American Institute of Architects.

The writer, who has been serving on this committee for the past year, desires to say that this proposed act does not meet with the approval of the committee in its entirety; it is approved generally with the exception of Articles 5 and 6, and the committee is divided about in half on these articles, as outlined hereafter.

The writer has approached you under date of October 17th in a letter asking for your support and also asking for your protest against Article 5 as it practically appears in this issue.

Will you not again take this matter up and urge all the members of the Society to take a real interest in this lien law, as it seriously affects your clients (your responsibilities), and is altogether detrimental to your clients' best enterprising interests.

The writer as well as your representative on the committee, Mr. Victor Mindelev, of Washington, D. C., solicits the earnest protests of yourself and members of your Society, and asks that you make your protests known in no uncertain tones as soon as possible.

The writer will again send you copy of his previous arguments as to why you should protest Articles 5 and 6, should you so desire.

Yours very truly,
(Signed) Gerhardt Meyne.

The Board of Directors requested that all criticisms of the proposed draft be sent to Mr. Robert C. Ostergren, Chairman of the

Legislative Committee, who will forward same to the National Committee.

The supplement to the second draft is published herewith for the information of our members.

"Section 5. (Duty of owner to retain percentage of funds; sworn statement to owner by contractor when final payment is due.) The owner shall at all times retain an amount equal to 10 per cent of that portion of the contract price, or if there is no contract price, of the value represented by labor or services performed and materials furnished to the date on which any payment is due to the contractor. Such 10 per cent of the contract price or value shall not be payable to the contractor until the expiration of thirty-five days after the date on which the improvement is substantially completed. After the improvement is substantially completed and before payment by the owner to the contractor of the final amount due and of the retained 10 per cent of the contract price of value, the contractor shall furnish to the owner a statement under oath showing in a lump sum the amount due or to become due to laborers directly employed by him for labor or services performed, * * * the names of every subcontractor and materialman directly employed by him and the amount, if any, which is due or to become due each for labor or services performed or materials furnished. Upon receipt of such statement, if the retained 10 per cent of the contract price or value is insufficient to pay all such amounts shown by the statement, the owner may retain * * * in addition thereto an amount sufficient to pay the difference between such retained 10 per cent and the total of such amounts shown by the statement and may pay such amounts in accordance with the respective rights of the subcontractors, materialmen and laborers unless the contractor procures over the signatures of such lienors and furnishes to the owner waivers of lien or receipts therefor, but a statement under oath by the contractor that payment has been made to a lienor shall be accepted by the owner in lieu of such waiver or receipt as sufficient evidence of such payment. Any payment so made by the owner shall reduce to the extent of such payment the indebtedness of the owner to the contractor. Such final payment made by the owner without either receiving such statement under oath or retaining, after receipt of such statement, sufficient money from such final payment to pay such difference or without procuring such waivers or receipts, or the contractor's statement under oath that payment has been made, shall not reduce the liens of such subcontractors or materialmen or of the laborers whose individual accounts constitute a part of the lump sum shown, except to the extent of any portion of such payment actually received by such subcontractor, materialman or laborer. The contractor shall have no right of lien nor right of action against the owner on account of labor or services performed or materials furnished under his contract, until the statement herein provided for is furnished.

Section 6. (Notices to owner by subcontractors, materialmen and laborers and payments thereafter.) A subcontractor, materialman or laborer may at any time during the progress of the work and before the expiration of the period allowed him by section 15 for filing a claim of lien furnish to the owner a written notice which shall be such as will inform the owner of the nature of the labor or services performed and to be performed, or the materials furnished and to be furnished, as accurately as possible the amount due and to become due, a description of the real property sufficient for identification, and a statement that such subcontractor, materialman or laborer will hold the owner for the payment of the amount or will exercise his right to lien therefor. Upon receipt of such notice the owner may retain from any money then due or to become due the contractor in addition to the amounts authorized to be retained by Section 5 hereof, an amount sufficient to pay the amount due or to become due such subcontractor, materialman or laborer for labor or services performed or materials furnished and may pay such amount to the subcontractor, materialman or laborer as it becomes due, unless the contractor procures over the signatures of such lienors and furnishes to the owner waivers of lien or receipts therefor, but a statement under oath by the contractor that payment has been made to a lienor shall be accepted by the owner in lieu of such waiver or receipt as sufficient evidence of such payment. Any payment so made shall reduce to the extent of such payment the indebtedness of the owner to the contractor. Any payment made by the owner to the contractor after receipt of such notice and before expiration of the period allowed by section 15 for filing claims of lien without either retaining such amount from the

amount due or to become due the contractor or procuring such waivers or receipts, or the contractor's statement under oath that payment has been made, shall not reduce the lien of a subcontractor, materialman or laborer except to the extent of any portion of such payment actually received by such subcontractor, materialman or laborer. The benefits of such notice furnished by any laborer shall insure to all other laborers employed by the employer of the laborer who furnishes such notice. The lien of a materialman or laborer employed by the owner may be perfected for the full amount due him for materials furnished or labor performed without the furnishing of such notice."

It is the Editor's opinion that in the preparation of the proposed lien law the material interests are securing about what they want, which is about all that could possibly be thought of in the way of protective legislation.

The owner, however, does not seem to have received very much protection. The law places an enormous burden on every owner, as is evidenced by a reading of the proposed Supplement.

As these columns have reported on previous occasion, the architectural and engineering professions, as such, do not seem to have received very much attention or protection in the proposed law.

It is the Editor's firm belief that the building industry would be better off in every way if every lien law on the statute books of every state was repealed and the question of credits put on the same basis as is the credits of general business.

Is it not time that the various interests composing the building industry should be able to conduct their own business in the same way that other modern business is conducted, without resorting to the subterfuge of forcing credits by mechanics' lien laws? The whole theory is wrong and always has and always will result in endless confusion and needless expense which all could be obliterated if the material dealers, manufacturers, contractors and other interests were compelled to do business in the same manner that business is conducted in every other industry.

F. E. D.

ON ADVERTISING

A report has been published in the March number of the Monthly Bulletin of the Illinois Society of Architects coming from the Michigan Society of Architects upon the subject of advertising. This report urges that architects ought to advertise both for the sake of the profession and for their personal advantage. The report takes the position that we have not advertised because we have clung to an overworn tradition called Ethics. It then proceeds to ask why we do a long list of other things which are equally bad or worse.

In answer to the contention that we do not advertise because of Ethics. A paper appeared in the Journal in February or March which endeavored to show that advertising, for architects, is a piece of business folly and that, if it is successfully done, will accomplish nothing more than to build up an additional expense, leaving us all on equal terms until someone is clever enough to think up a new scheme. The contentions of this paper were offered for criticism to a very successful merchant and heavy advertiser. His conclusion and advice was that architects would very soon ruin themselves if they got drawn into advertising or would spend endless money before anyone found out, really, how to do it.

In answer to the charges which this report makes of common practices. Examples can be found of all of these things, but they are not common practice by all architects. Many of them are things of which the Institute disapproves and advises against. Some of them are of no consequence, but are set forth in the report in such a way that they have a very bad sound.

The whole list of misdemeanors, some of which are real and some of which are largely imaginary, are set out in such a way that a reader, unfamiliar with the facts, would suppose that they were all things recognized and approved by the Institute. This is not fair argument.

If advertising is a good thing, those who believe in it should come to conventions and fight for what they believe to be right. It is not a convincing argument to say that because certain abuses exist, other things should be allowed.

Abram Garfield, Chairman,

Committee on Practice, A. I. A.

ADVERTISING THE MUTE PROFESSION OF ARCHITECTURE

Down through the ages architects have been creating structures which have been beautiful to look upon and which have served as shelter and protection for the persons and objects they housed. In every age and in every country it has been these projects, conceived by architects, which have remained in memory and served as an inspiration to greater achievement. The ugly and mediocre have been ignored or soon forgotten.

In this country our architectural history has a comparatively short background. Much of our early architecture of note was produced by those who had received their training in England or on the Continent. It is only a comparatively few years since it was common to learn of building projects in this country designed by architects from other countries.

Architecture in the United States today leads the world and structures are being reared in England, on the Continent and in the Far East designed by men who are leaders of the profession in this country. We are leading the entire world in architecture, and each year sees a growing number of students coming to our shores to study our architectural designs and methods.

Since 1876 (the year in which the American Architect was founded) there have been greater strides in architectural development than in all previous history and this development has had its greatest unfoldment in the United States. This has been due in part to an architectural awakening in men who were naturally fitted for this profession and in part to the invention and utilization of products (like structural steel, for example) that have made possible types of structures and methods of construction never before dreamed of. Today a handful of men with modern equipment could build the Great Pyramid in nine months.

The architects in this country have been fortunate in that there has been an ever increasing number of individuals who had sufficient appreciation of architecture and its value, both esthetic and utilitarian, to give scope to their genius. This has been particularly true of our more important structures, although even in some of these the unwillingness to pay for real architectural service has resulted in ugly and ill adapted buildings.

With the outstanding examples of good architecture everywhere in evidence in our more imposing structures it would be natural to expect that our domestic or residential architecture would reflect the same high character. But such is not universally true. In many communities we find that a high character of design is not maintained. Property values and architectural standards are lowered because of the presence of houses built from contractors' stock plans or the activities of avaricious real estate developers.

If the public, generally, had understood the service an architect renders and that a house suitable for individual needs could be secured at no greater cost than an inferior shelter, the result would have been vastly different.

But architecture—the profession—is mute because of its ethical standards. An architect cannot ethically advertise his own practice any more than can a doctor or lawyer. Professional bodies of architects could advertise professional service, but, except in rare instances, this has not been done.

The value of good architecture and of good architectural service should be blazoned from the housetops and some day it will be. Then structures from the humble cottage to the industrial plant, to our towering apartment houses, will be an inspiration of beauty as well as perfectly adapted to the purpose intended.

Architecture—the mute profession—needs advertising and the American Architect is taking the first step in this direction, even though a comparatively feeble one. On another page is presented a reproduction of the first advertisement advocating the employment of architects to appear in a national consumer medium. This is running in the May number of House and Garden. Others will follow from time to time.

Whatever the effect on the building public may be, the facts as set forth in this advertisement are correct. We hope that this will be the pebble cast into the placid pool, the ever-extending waves of which will awake the American public to an appreciation of the true value of good architecture.

If you care to volunteer any comment on the advertisement itself or on the policy of this journal in doing what it can to stimulate public interest, we will appreciate hearing from you.

—The American Architect.

MORE ABOUT ADVERTISING

The code of ethics of the American Institute of Architects has branded paid advertising by the individual architect as "un-

ethical," and the profession as a whole has followed the instructions thus laid out by its representative body and without any further examination into the subject. There are, however, a certain number of men not members of the Institute who continue to advertise in their local papers, or through mediums which reach the prospective home-builder, such as Country Life, House and Garden, and the Ladies' Home Journal. Advertising by these men has continued for a number of years and it is improbable that they would continue the practice did not they find it to be beneficial; and the success which several men of less than mediocre ability have attained through the medium of advertising occasionally leads other members of the profession to consider advertising themselves, and it is to the attention of these men that the writer desires to call a feature of advertising which is not generally understood.

In the first place, advertising of all sorts, whether on the billboards, in the daily papers and the magazines, or through circularization, brings results in one way only—through focussing the attention on one particular article or person in a large field. But if all other manufacturers or individuals in the same field advertise their product or themselves with equal vehemence, the product which eventually becomes most popular is liable to be that which is backed by the longest purse. This can be no better illustrated than by the advertising signs above the shop windows. In the little English country town the only advertising one sees is a small painted inscription on the window-glass or on a small wooden signboard telling that John Smith deals in groceries (or some other commodity), and everybody in that town has an equal opportunity to sell his goods on merit. There isn't any doubt but that if William Jones should erect in the middle of a block of these modest signs an enormous billboard giving his name and occupation and resplendently advertising the superiority of the wares which he sells in that shop, he would attract a certain amount of trade away from the other and less conspicuous dealers on the same street. But this would lead the other dealers to advertise their wares in a similar manner and William Jones' advertising would be neutralized; so that the net result would be that every man on the street would have spent seventy-five or a hundred dollars for a new sign without increasing his trade a penny's worth unless his advertising was in some way more attractive than the others.

Should architects begin thus to advertise, their success would depend no longer upon the quality of the work which they produce, either architecturally or practically, but entirely upon the capabilities and cleverness of the press agent or advertising company which they employ, and if all architects used an equal amount of advertising backed by an equal amount of brains the net result would be found to be the transfer of a considerable amount of money from their pockets into those of the advertising agents' without any gain whatsoever in the gross amount earned by the profession.

There is one possible beneficial result for the profession as a whole from advertising. This is that a greater percentage of the work throughout the country would be done by architects than is now the case, but this result could be better obtained by collective advertising of the profession and press-agent work informing the public as to the value of the architect's services and the necessity of employing an architect for commercial jobs, or even for those which at first sight appear of but minor importance. Such collective advertising is being done by manufacturers of certain trade articles, and to the writer at least seems by far the most useful form of advertising as well as the least expensive. That such collective advertising would be beneficial to the architectural profession seems to be somewhat comprehended, if one may judge from the fact that the American Institute of Architects and each of its branches as well as practically all architectural societies have press or publicity committees, although the work of these committees is in general formless and indefinite. One or two chapters of the Institute have gone about the matter in what would seem to be a useful, dignified and proper way, although it appears to be in conflict with the code of ethics of the Institute. These chapters purchase advertising space from the daily papers in their localities and publish brief articles intended to inform the public as to the value of architectural services and as to the qualifications of members of the Institute. Thus far, however, the best advertising of the architectural profession has been done for it by manufacturers, some of it direct and some of it inferential. For instance, brick companies and companies manufacturing steam-heating plants have, to the writer's knowledge,

issued circulars which contain some advertising of the goods manufactured, accompanied by long articles on the duties and responsibilities of architects, and statements as to why architects should be employed. This is direct advertising of the architect by the manufacturer. Advertising by inference generally runs in somewhat this form: "Ask your architect if Jones' varnishes are not the most reliable. He knows." And this type of advertising is perhaps almost as valuable as the other, since it inevitably leads the public to have a respect for the technical knowledge of the architect as well as for his artistic attainments.

It seems, on the whole, entirely aside from any question of ethics, that general advertising of individual practitioners of architecture would not be of benefit to them nor to the profession; on the other hand, collective advertising by associations of architects would be of value both to the individual and to the profession.

—From a recent issue of *Architecture*.

LESS WASTE IN BUILDING INDUSTRY

Greater efficiency in building and less wasteful use of building materials, as a means of preserving high living standards, was recently advocated by N. Max Dunning, Chicago architect, before the annual meeting of the National Committee on Wood Utilization of the Department of Commerce. Mr. Dunning spoke highly of the work of the committee and foretold material economic benefits to accrue from utilization and cooperation under its leadership.

"The architect, as a professional man with a responsibility to the public, is vitally interested in the work being accomplished by the National Committee," he said. "If present high standards of living are to be maintained and increased—as we all hope and believe they will be—the burden of the higher wage and better working conditions must be offset by a greater application of scientific methods in building operations, and to a more intelligent and less wasteful use of the materials entering into buildings.

"Wood, from many considerations, is the most important of these materials, and without question the material where waste in the past has been the most extravagant.

"The work of the National Committee on Wood Utilization that seeks to develop ways and means for making a larger percentage of the tree merchantable, accomplishes many purposes. It stabilizes the lumber industry; it reduces the cost of lumber to the consuming public; it extends the scope and knowledge of appropriate uses of various kinds of lumber; and, most important, it goes far toward making reforestation commercially feasible in the United States, thus insuring for future generations a continuous supply of this indispensable material.

"The architect is primarily interested in the use of lumber in buildings and realizes that great economies can be effected by improvements in methods of framing that will develop the full strength of lumber sections and secure permanence and durability of construction; that for many purposes short lengths of lumber can be used as well as long; that, with the perfection of modern joining machinery, blocks and odd sizes can be worked up for floors, wainscoting and for other purposes, thus eliminating waste and utilizing far greater proportions of the long than are commercially possible now.

"In this important problem there is a great field for cooperative effort, and under the leadership and cooperation of the Department of Commerce great benefits may be expected to accrue.

"The architect, as always, is glad to lend his professional viewpoint and experience to any effort that makes for progress and the public weal."

CORRESPONDENCE

Dear Mr. Davidson:

Replying to yours of April 26 re illustrated talk on "Specification-Structure" which I gave before the Illinois Society of Architects on April 24.

I regret to say that on this occasion I spoke impromptu, using outline as shown on stereopticon slides and with no prepared manuscript. The outline which I used is published on pages 751-752 and part of page 753 of Volume XXX of the Illinois Society Handbook for Architects and Builders. It was also quoted in Mr. Beach's article which appeared in the April number of *Pencil Points*. In consequence, republication would be useless duplication.

There were also shown some slides made from copies of our current specifications illustrating the manner in which the system

which I recommended was applied to a specific job. The preamble to my discussion, as printed in the announcement, represents the crux of the whole subject of specification writing. This seems worth repeating:

The structure of a specification should be so logically planned that—

- (a) A description of any material or workmanship required in the building, its furnishing or decoration can be quickly and easily located.
- (b) Any part of the specifications can be written at any time and find its correct paragraph, numbered and indexed without disturbing the position of any other part.
- (c) Every portion of a specification which might practically be the subject of a separate direct or sub-contract should be so written and isolated as to be a unit in itself and yet form a logical consecutive part of the whole.
- (d) Materials and workmanship common to more than one contract division, trade division, or other subdivision of a specification is specified in detail, but once and thereafter referred to only by title or paragraph number.

To be able to quickly locate matter in a specification it is necessary in the first place that there be a logical reason for always placing it in the same relative position; second, that there be some system of paragraph numbering that, once familiar with same, it always conveys to the mind of the reader when the number is seen, the nature of the subject matter which may be expected to be discussed under that number.

The system of paragraph numbering must be so logically arranged as to make it possible to find the right paragraph number with which to start any division of the specification without having previously written the preceding divisions. It makes no difference whether the architect follows the practice of letting separate contracts for the various divisions of work required in the buildings which he designs, if he does not follow the practice of separately letting the work, then the general contractor must follow that practice. If the separate trade divisions are not clearly defined in the specifications, then the general contractor is forced to rewrite the specifications in order to let his subcontracts in accordance with trade custom.

If trade divisions are scattered throughout the specifications as so often occurs, then in the process of rewriting there is great danger of omitting certain required work. Rewriting of the specifications by the general contractor for his subcontracts means duplication of work, means forcing on the general contractor a portion of the work which the architect has contracted to perform.

If the contractor has to rewrite the specifications and redraw the plans and details in order to subdivide the work in such a way as to make it practical to sublet his work according to established trade divisions, it is not going to be very long before the general contractor is going to ask the question, "Why the architect?" and after he has asked the question a few times he is going to say, "I am the architect, why bother with another?" and he is going to sell that proposition to our clients and we are going to have a great deal of difficulty in meeting his sales talk if our plans and specifications are not so drawn as to meet the practical conditions of trade practice.

At best the plan drawing, detailing and specification writing for a building involves the architect's office in an enormous amount of routine work. If a lot of this work is duplication, there is unnecessary waste and a tendency to kill interest before the job is finished.

Many specifications for buildings numerously repeat detailed specifications for materials under the various trade headings. This is unnecessary waste. Specifications properly planned do not need to repeat that which is once specified.

To form an elastic logical, easily remembered system specification group division, article, section, paragraph and subparagraph nomenclature, I find no system so practical for this purpose as the system invented by Melville Dewey, formerly Director of the New York State Library, a system of cataloguing which has been almost uniformly adopted by the public and private libraries of this country.

The Dewey system, commonly known as the "Decimal System," is too familiar to all educated people to need detailed description. Suffice it to say that it is a decimal system of numbering by

which each succeeding number is a subdivision of the subject matter represented by the preceding number. The number 690 in the Dewey general classification means 600—Useful Arts, 90—Building, 0—General Works on Building, so that the figure 690 readily reads the "General Works on the Useful Art of Building." The fourth subdivision under General Works on the Useful Art of Building is "Specifications," so that 690.4 means "Specifications for Buildings."

It has seemed logical to me to subdivide the specifications for buildings into trade groups on the theory that trades which use common materials and tools can be grouped together and effect a uniformity in specification writing. To this end I have subdivided 690.4 into ten subdivisions as follows:

Group 0—Matters pertaining to all Trades.

I—The Common Labor Trades, Earth-working and Transportation, etc.

II—Mortar Using Trades.

III—Woodworking Trades, including Rough and Finish Hardware. Rough and Finish Hardware is included with the Woodworking Trades because it is applied by carpenters with carpenter tools, the same tools that are used in other Woodworking Trades.

IV—Heavy Metal Trades, embodying material heavier than No. 10 gauge, distinguished from the Sheet Metal Trades due to the fact that material falling under the Heavy Metal Trades cannot be bent with the break and mallet, as is possible with the Sheet Metal Material.

V—Sheet Metal Trades, embodying metal of No. 10 gauge or less.

VI—Brush, Broom and Swab Using Trades, commonly known as the Brush Trades, involving all material spread or applied with the brush, the putty knife, or the spatula.

VII—Pipe Trades.

VIII—Wire and Conduit Trades.

IX—Machinery and Miscellaneous Trades.

With this group division it is possible to introduce each group specification with an Article 0 containing general matters particularly referring to that trade, followed with an Article I specifying definitely the elementary material used in that trade group, and an Article II describing those methods of construction and assemblage of material which are common to practically all of the trades of that group and an Article III made up of a series of subdivisions of lettered contracts applying to the various trades falling under that group, always in all specifications using the same contract letter for the same contract subdivision.

Under the contract specifications it is unnecessary to repeat general conditions specification of material, or general construction specifications, as these items have already been covered once and thoroughly for the entire group. Title reference with quotation marks carries everything about a material, about a construction, or about a general condition that is included in the detailed specification, in Articles 0, I and II. The contract specifications, therefore, needs to be little more than a schedule of the work required, thus enabling the specification writer to concentrate his mind entirely on the question of accurately enumerating the work required under that trade division.

E. S. Hall.

THE ARCHITECTS CLUB OF CHICAGO

The following is a list of the exhibitors at the Architects Club First Annual Exhibition. This exhibit is creating considerable comment and is well worth being examined by every member of the Illinois Society of Architects, whether a member of the club or not.

Revised Final List of Exhibitors—Architects Club First Annual Exhibition

(Where no name is shown at right of company, it indicates that the individual or one of the partners in the firm is a club member.)

| | |
|------------------------------------|----------------------------------|
| American Cement Paint Co. (Kramer) | Architectural Dec. Co. (Schmidt) |
| American Terra Cotta Co. (Gates) | Assoc. Metal Lath Mnfrs. (Clay) |
| Alschuler, A. S. | Athey Co., The (Weary) |
| Alberene Stone Co. (Buchroeder) | Atlas Iron Works (Husmann) |
| | Barton Spider Web System |
| | Batchelder-Wilson Co. (Glidden) |

| | |
|--|---|
| Bell & Gossett (Pullum) | Illinois Hardware Co. (Walsh) |
| Bennett-Parsons & Frost | Illinois Society of Architects (Palmer) |
| Berthold Electric Co. | Indiana Limestone Co. (Pettit) |
| Blouke, Pierre | Ingstrup-Buhrke, Inc. (Schilling) |
| Bond, Ralph A. | Interstate Fireproof'g Co. (Smith) |
| Bonner-Marshall Brick Co. | Jenkins, H. D. |
| Bryant Electric Co. (Thomas) | Johns-Manville Co. (Fairbrass) |
| Burdick Corp., The (Melville) | Johnson-Meier Co. (Roth) |
| Burke Stone Co. (Wolff) | Kaestner & Hecht (Balfanz) |
| Burnham & Co., D. H. | Kellogg-Mackay Co. (Lockie) |
| Cheney, Howard | Kerner Incinerator Co. (Carr) |
| Chicago Arch. Photo. Co. (Ericson) | Knapp Bros. Mfg. Co. |
| Chicago Art Marble Co. (Pareira) | Lally Column Co. |
| Church Mfg. Co., C. F. (Baer) | Matteson, Victor A. |
| Clow & Sons, Jas. B. | Meyne, Gerhardt |
| Concrete Eng'g Co. (Walker) | Moors & Co., E. B. (W. H. Moore) |
| Cooper, R., Jr. | Morgan, Chas. L. |
| Craftex Co., The (Thomas) | Moulding Co., Thos. A. |
| Crane Co. (Verity) | Mueller, Paul F. P. |
| Curtis Lighting Co. | Mundie & Jensen |
| Dean, Olney J. (Cutler) | National Lead Co. (Maynard) |
| Dee Co., Wm. E. | Nimmons & Co., Geo. C. |
| Edison Electric Appliance Co. (Senour) | Northwestern Terra Cotta Co. (Sierks) |
| Electric Assoc., The (Heimbrot) | Otis Elevator Co. (Malcolm) |
| Everson Co., C. G. | Patent Scaffolding Co. (Hurbuth) |
| Farrier, C. W. | Pearlman, Victor |
| Fiat Co. (Nilson) | Pescheret, Leon R. |
| French Co., J. B. | Pitts'gh Testing Lab. (Holmes) |
| French Shops (Morel) | Pond & Pond |
| Fuller, Geo. A. (Belden) | Pratt & Lambert (Woodyard) |
| Garden-Vail Co. | Pridmore, J. E. O. |
| Goder Incinerator Co. (Lessard) | Rapp & Rapp |
| Graham, Anderson, Probst & White | Rising Decorating Co. |
| Granger & Bollenbacher | Rossman Corporation (Jeffrey) |
| Gross Metal Products Co. (Mortenson) | Safety Stair Tread Co. (MacNab) |
| Guenzel, Louis | Schmidt, Garden & Erickson |
| Hamilton, Fellows & Wilkinson | Sherwin-Williams Co. (Stratton) |
| Henschein & McLaren | Strandberg Co., E. P. (Erickson) |
| Holabird Roche | Travertex Co. (Hamil) |
| Howard-Matz Brick Co. | Tyler Co., The (Ross) |
| Hydraulic Press Brick Co. (Varney) | Urbain, Leon F. |
| Ideal Sash Weight Co. (Washburne) | U. S. Gutta Percha Paint Co. (Wilcoxon) |
| | Van Dort, G. B. |
| | Voightman & Co. (Krutzkoff) |
| | Wagner Hanger Co. (Etzbach) |

PUERILE LEGISLATION AIMED AT CONTRACTOR

A beautiful set of restrictions on contractors engaged on public work for the federal government has been proposed in H. R. 11141, a bill recently introduced in the House of Representatives by Robert L. Bacon, New York.

This bill provides that in employment on all public works projects contractors shall give preference in regular order to: 1. Citizens of the United States who have been honorably discharged from military or naval forces. 2. Citizens who are bona fide residents of the state, territory or district in which the work is to be performed. 3. Citizens of the United States. 4. Aliens.

"That every such contractor or sub-contractor shall keep a list of the names of the laborers and mechanics employed by him upon such work, setting forth their citizenship and place of residence. Such list shall be available for examination by any officer or employee of the United States. Every such contract shall stipulate a penalty for each violation of such provisions in such contract of \$5 for each laborer or mechanic for every calendar day in which he shall be required or permitted to labor upon such work in violation of such provisions."

The bill provides for a system of inspection by federal agents to see that the contractor or the subcontractor has complied with all the provisions of the law.

This discrimination against 5, Episcopalians; 6, Dalicho-Cephalic blondes; 7, Sons of the American Revolution; 8, Under-slung pipe smokers; 9, Knights of Pythias; 10, Expert craftsman, is so rank that it stirs us to our depths. Had the honorable representative from New York arranged a genuine masterpiece of restrictions such as the one suggested above it would have been

possible to admire the breadth of his social contacts. As the proposition stands we are opposed to it, for there would not be a legally manned project operating for these United States. A new supply of five dollar bills would be needed to furnish contractors with handy currency to pay the per diem fines neatly arranged for in the bill.

Imagine the contractor holding up his project until he finds out just where in the priority list Mike Dempsey and Antonio Sordellugio belong before he can appoint either to administer picks and shovels, lay brick or even superintend the operations. Gaze sorrowfully after him as he busily hastens to and fro trying to ascertain whether Mike or Tony are properly qualified voters in their various precincts. View him determining whether either ever served in a branch of the military forces and whether discharges were forthcoming because of lapse of time or edict of a court martial.

When and why Slim Calhoun, the artist among plasterers, left Arkansas for Indiana will be a problem as important to the profitable outcome of the job as the fact that Slim can run difficult mouldings better than anyone else in the outfit. Was George Johnson, the sought after cement finisher, born a Swede or in Minnesota? Suppose it turns out that the skilled rigger and plant erection foreman, Hans Wagner, made the mistake of issuing his first yell in Copenhagen instead of in Milwaukee, is he to be summarily replaced with Abe Gavinsky, who was more expeditious in removing to this country from his native land?

The sponsor of this notable piece of statesmanship should consider the lowly contractor and his problems. There is but one reason why one man should be employed in preference to another on construction operations. That reason has some vague relation to skill, productivity and knowledge of the work. If Robert Stark Lowell, world war veteran, descendant of revolutionary stock, staunch Republican, and permanent resident of Cambridge, hankers after the position of concrete foreman, the proper procedure is to study concrete, work in it, feel it, test it, and even to read about it. When he knows his concrete, Mr. Lowell will need no law passed to give him preference. Contractors will be anxious to secure his services.

—From The American Contractor, March 3, 1928.

GOLF

What is this Golf?

Golf is a form of work made expensive enough for a man to enjoy it. It is a physical and mental exertion made attractive by the fact that you have to dress for it in a \$200,000 clubhouse.

Golf is what letter-carrying, ditch-digging and carpet-beating would be if those three tasks had to be performed on the same hot afternoon in short pants and colored socks by gentlemen who required a different implement for every mood.

Golf is the simplest looking game in the world when you decide to take it up, and the toughest looking after you have been at it ten or twelve years.

It is probably the only known game a man can play as long as a quarter of a century and then discover that it was too deep for him in the first place.

The game is played on carefully selected grass with little white balls and as many clubs as the player can afford. These little balls cost from 75 cents to \$25, and it is possible to support a family of ten people (all adults) for five months on the money represented by the balls lost by some golfers in a single afternoon.

A golf course has eighteen holes, seven of which are unnecessary and put in to make the game harder. A "hole" is a tin cup in the center of a "green." A "Green" is a small parcel of grass costing about \$1.98 a blade and usually located between a brook and a couple of apple trees, or a lot of unfinished excavation.

The ball must not be thrown, pushed or carried. It must be propelled by about \$200 worth of curious-looking implements, especially designed to provoke the owner.

Each implement has a specific purpose and ultimately some golfers get to know what that purpose is. They are the exceptions.

After each hole has been completed the golfer counts his strokes. Then he subtracts six and says, "Made that in five. That's one above par."

—Better Advertising.

ANOTHER ONE

March 12, 1928.

Evidence now in possession of this office indicates clearly that leaders of certain unions and excavating contractors have for a period, and until recently, been engaged in a conspiracy in restraint of trade. The conspiracy fixed the price of excavating, eliminated the undesirable competitor, limited the amount of yardage a contractor might excavate, and divided the city into districts in which only designated contractors might operate. Any failure on the part of the contractor to observe or abide by the rules of this conspiracy resulted in immediate tie-up of his job by a strike of the teamsters.

We are now assured that this conspiracy does not longer exist and will not be resumed. Strikes have occurred on excavating jobs in furtherance of the conspiracy. These have been called off and work is in progress so far as our knowledge goes. You are, therefore, free to contract for your excavating work with any contractors you choose and at the best competitive price.

Will you as an architect coming in contact with excavating and its problems be good enough to notify this office of any difficulty you may henceforth encounter by reason of any trade restraint?

G. L. Hostetter,

Executive Secretary,

The Employers' Association of Chicago.

A COMPARISON

One of the large public service corporations, after its annual survey of the City of Chicago, found that on December 1, 1927, there were 48,000 vacant apartments in the city; that 25% of all hotel apartments were vacant, and that 30% of the 48,000 vacant apartments were in buildings constructed within the past three years. They also found that on December 1, 1927, there were 11,000 apartment buildings under construction.

As compared to their survey for the same period as of 1926, the following may be noted as the situation regarding vacancies at that time:

| | |
|--|--------|
| Vacant apartments..... | 30,000 |
| Vacant rooms in hotels..... | 15% |
| Apartment buildings under construction December 1, 1926..... | 13,000 |

REVISING THE CHICAGO BUILDING CODE

The Editor is advised that but little progress is being made in the preparation of the proposed revised Chicago Building Code. Certain sections are reported to be in fair condition, but in general the rate of progress being made would seem to indicate that several years will be required to complete the work and to enable the committee to report its findings to the City Council.

In the meantime, Chicago must worry along with its present antiquated code, depending on special rulings by the Commissioner of Buildings to secure the benefit of some of the improvements in construction that have been made since the code was enacted into law many years ago.

THE PLYM FELLOWSHIP IN ARCHITECTURE

Report of Judgment

The Plym Fellowship Committee announces the choice of Granville S. Keith, 504 East Chalmers Street, Champaign, Ill., as winner of the final competition for the Francis J. Plym Fellowship in Architecture for the year 1927-28. Mr. Keith is being recommended to the Board of Trustees for appointment as the Fifteenth Plym Fellow. Mr. John Judson Rowland is recommended as alternate.

Plym Fellowship Committee.

April 18, 1928.

L. H. Provine, Secretary.

MICHIGAN SOCIETY OF ARCHITECTS HONORS ILLINOIS ARCHITECTS

The Michigan Society of Architects recently elected to membership the following Illinois architects:

Alfred Granger, Past President, Chicago Chapter, A. I. A.

Leon E. Stanhope, President, Illinois Society of Architects.

F. E. Davidson, Past President, Illinois Society of Architects.

THUMB NAIL SKETCHES

"You're only young once, but if you work it right, once is enough."

"If you want work well done, select a busy man—the other man has no time."

Granger and Bollenbacher announce the removal of their offices to 333 North Michigan Avenue.

"We heard a preacher say that there will be more women than men in heaven. Some sales talk."

"When we are unable to say just what we mean, it is because we don't understand what we are trying to say."

"Experience has taught us that organizations reflect exactly the spirit of the organization's leadership."

Leon E. Stanhope announces the removal of his offices to the thirty-first floor of the Pittsfield Building, 55 East Washington Street.

"Keep a man waiting and you give him time to think of several reasons why he should not do what you want him to do."

"A certain drug store advocates preparedness with this sign above its soda fountain: 'Take home a brick, you may have company.'"

Arthur R. Dean, A. I. A., announces the removal of the offices of Dean & Dean, Architects, to Suite 2017-2019 Engineering Building, 205 Wacker Drive.

"You can make up your mind to do one of two things: You can have a 'good time' in life or you can have a successful life, but you can't have both. There is no royal road to a successful life; it has got to be hard knocks and fixity of purpose, morning, noon and night."—Charles M. Schwab.

Try this out and see if you get the same total.
 In what year were you born?.....
 What is your age?.....
 In what year did you take your present position?.....
 How many years have you worked at this job?.....
 Total..... 3856

The appointment of Alexander H. Marshall as Village Attorney for Glencoe was unanimously confirmed by the Glencoe Board of Trustees on Friday evening, May 11, 1928.

"Why should a man risk his life to get across the street when the traffic is against him and then stop on the other side to light a cigarette?"

"He that knows not and knows not that he knows not is a fool—shun him.

"He that knows not and knows that he knows not is simple—teach him.

"He that knows and knows not that he knows is asleep—awake him.

"He that knows and knows that he knows is wise—follow him."

George C. Nimmons & Company announce the removal of their offices to 333 North Michigan Avenue, and the change of the firm name to Nimmons, Carr & Wright to include Mr. George Wallace Carr and Mr. Clark C. Wright, who have been associated with the firm as partners for the last eleven years.

"A Code of Practice is an attempt to legislate morals into the good profession of architecture. Civil life presents a tremendous example of such an effort. Please protect architecture from morals. And this is the way it works: A man will energetically adhere to a Code as long as it stays within the limits of his own Conscience, but the moment the Code rises above the Conscience he'll go by the Conscience and split the Code wide open. Some men's standards are higher than others, and so their Code is higher. You just can't legislate morals into an Architect, they've got to be born with them." —Ink Spots.

WHITE HOUSE VALUE \$22,000,000

President Coolidge's residence in Washington, the White House, and its surrounding grounds are valued at about \$22,000,000, according to a recent estimate by Tax Assessor William P. Richards of the District of Columbia. The estimated value of the Capitol is \$53,000,000 and that of the Treasury Department building is \$23,000,000. Richards fixes the value of all Federal property in the District at \$470,000,000.

"Experts with searchlights have been put on the track of the echo at the Albert Hall which was responsible for spoiling the first attempt to stage grand opera there. The searchlights were equipped with a contrivance which made a sort of clattering noise and the beam was swung about the roof until it reached a spot from which an echo was thrown back to the operator. These places are to be treated with felt and other sound absorbents in the hope that when they have all been located and dealt with, the acoustics of the building will give no more trouble. The Daily Chronicle quotes one of the experts engaged in this seven-week task as saying that echoes in the Albert Hall and other buildings have increased in volume during recent years. And the reason? 'With their shingled hair and skimpy clothes,' he said, 'women are not as sound absorbing as they were when dresses were voluminous and hair fluffy.'"

—Christian Science Monitor, January 3, 1928.

PASSING OF THE BATHTUB?

Bathtubs are out of date and should never be installed for public use, as they are unsanitary, difficult to keep clean, take too much time to fill, and require too much space. If you question the first statement, just ask your family physician, and the second may be answered by either the housemaid or the hotel maid or some member of the family who has to do this work. It takes a long time to rinse a bathtub and fill it with water of the right temperature. Also, in these days space is too valuable, especially in apartments and hotels, to consider bathtubs. Those using bathtubs are usually most extravagant with water, due to their not actually using the water at the time it is flowing in, and therefore they allow the tubs to become too full or to overflow with water that is either too hot or too cold. This means a waste of water, as it must be brought to the proper temperature by adding more hot or cold water.

Now, with showers, the bathers usually are actually using the water while it is running; therefore they have it at the proper temperature and always turn it off when finished. By actual measurement, a shower takes less than one-third the amount of water that is used in taking a tub bath.

Mention should be made regarding how much more sanitary showers are than tubs, even at home, as unclean water is immediately carried away in the shower, which is not so with tub baths.

With this idea properly presented to the customer, the plumbing fixture industry has done him a good turn and has lessened the cost of water heating service. The cost of water, the cost of heating water, and the maintenance of the baths are all subjects that need consideration, as they figure in the monthly budget and must be of interest to the architects, builders and owners.

—The Architect and Engineer, January, 1928.